

[illegible]

The diagram shows a 3D coordinate system with axes X, Y, and Z. Vector  $F_1$  lies along the X-axis. Vector  $F_2$  is in the XY-plane, making an angle  $\theta_2$  with  $F_1$ . The resultant vector  $F$  is the vector sum of  $F_1$  and  $F_2$ . The projections of  $F_1$ ,  $F_2$ , and  $F$  onto the Y-axis are labeled  $F_1'$ ,  $F_2'$ , and  $F$  respectively. The projections onto the Z-axis are labeled  $a_1'$ ,  $a_2'$ , and  $a'$  respectively. The angle between  $F_1$  and the Z-axis is  $\theta_1$ .

Fig.3

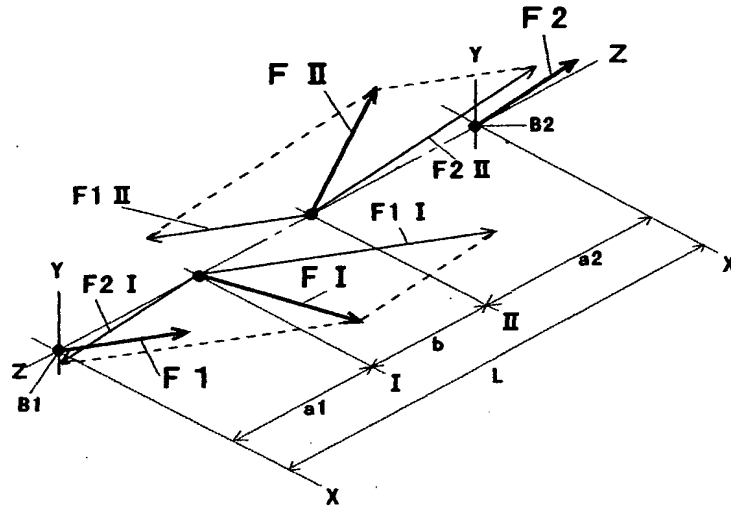


Fig.4

